PERMIT TO CONSTRUCT
-Modification-

COMPANY NAME: PARAMOUNT PETROLEUM CORP
ID No. 800183

MAILING ADDRESS: 14700 Downey Ave
Paramount, CA 90745

EQUIPMENT LOCATION: 14700 Downey Ave
Paramount, CA 90745

CONTACT PERSON: June Christman
(562) 748-4704

PROJECT SUMMARY

Currently, Tail Gas Incinerator H-402 is fueled with refinery fuel gas only. Paramount Petroleum proposes to add a natural gas fuel line that provides the capability to fuel H-402 with natural gas. This will allow the use of either natural gas or refinery gas. Paramount claims that burning clean natural gas will reduce the frequency of H-402 burner tip fouling and will reduce maintenance. It will also reduce the occurrence of potential permit deviations caused by temperature dips below 1400°F due to fouled burner tips.

EQUIPMENT DESCRIPTION

Additions to the Facility Permit are noted in underlines and deletions are noted in ~~strikeouts~~.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 7: SULFUR RECOVERY UNIT					
System 3: TAIL GAS INCINERATOR					S18.7
INCINERATOR, H-402, PROCESS GAS, REFINERY GAS, NATURAL GAS, JOHN ZINK VERTICAL TYPE, 10 MMBTU/HR WITH BURNER, JOHN ZINK, A/N: ~~436741~~ 512251	C175	D172	NOX: MAJOR SOURCE SOX: MAJOR SOURCE	**CO**: 2000 PPMV (5)[**RULE 407,4-2-1982**]; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981];** **PM: (9)[RULE 404, 2-7-1986**]	A72.1, B61.2 C8.4 , D28.3 D28.4, D90.2 D90.7, D323.1 E71.4 , H23.4 I1.2 , I1.3

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Permit to Construct Issued:					
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: ~~436741~~ 512251 Permit to Construct Issued:	D718				H23.2

CONDITIONS

S18.7 All affected devices listed under this process/system shall be used only to receive, recover, and/or dispose of vent gases routed from the system(s) or process (es) listed below, in addition to specific devices identified in the "connected to" column:

Sulfur Recovery Unit (Process: 7, System: 1 & 2)
Soil Vapor Extraction (Process: 13, System: 3)
Caustic Storage & Scrubbing Unit (Standby for Amine/Fuel Gas Treating & SRU) (Process: 6, System: 6)

[**Rule 1303(a)(1)-BACT, 5-10-1996**; Rule 1303(a)(1)-BACT, 12-6-2002; **Rule 1303(b)(2)-Offset, 5-10-1996**; Rule 1303(b)(2)-Offset, 12-6-2002]
[Systems subject to this condition: Process 7, System 3]

A72.1 The operator shall maintain this equipment to achieve a minimum overall control efficiency of 95 percent for ROG during the normal operation of the equipment it vents.

[Rule 1176, 9-13-1996]
[Devices subject to this condition: C175]

B61.2 The operator shall not use fuel gas containing the following specified compounds:

Compound	ppm by volume
H2S greater than	160

The H2S concentration limit shall be based on a rolling 3-hr averaging period.

[40CFR60 Subpart J, 6-24-2008]
[Devices subject to this condition: D27, D29, D30, D31, D44, D45, D46, D73,

D74, D75, D76, C175]

C8.4 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1400 Deg F.

To comply with this condition, the operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the firebox or in the ductwork immediately downstream from the firebox.

The measuring device or gauge shall be accurate to within plus or minus 50 degree F. It shall be calibrated once every 12 months.

The operator shall install and maintain a device to continuously record the parameter being measured.

[**Rule 1303(a)(1)-BACT, 5-10-1996**; Rule 1303(a)(1)-BACT, 12-6-2002; **Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997**; **Rule 468, 10-8-1976]**
[Devices subject to this condition: C175]

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the Benzene at the inlet and outlet.

The test shall be conducted to determine the VOC emissions at the inlet and outlet.

[**Rule 1303(a)(1)-BACT, 5-10-1996**; Rule 1303(a)(1)-BACT, 12-6-2002]
[Devices subject to this condition: C175]

D28.4 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the CO, PM and ROG emissions at the outlet.

The test shall be conducted at least once every three years.

[**Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997**; **Rule 404, 2-7-1986; Rule 407, 4-2-1982; Rule 409, 8-7-1981]**

[Devices subject to this condition: C175, C531]

D90.2 The operator shall periodically analyze the concentration of VOC in ppmv as hexane at the inlet and outlet of the incinerator according to the following specifications:

The operator shall use a flame ionization detector (FID) or a District approved organic vapor analyzer (OVA) calibrated in ppmv of hexane to analyze the parameter.

The operator shall analyze once every day for the first seven days , then every seven operating days for a month thereafter.

[**Rule 1303(a)(1)-BACT, 5-10-1996**; Rule 1303(a)(1)-BACT, 12-6-2002; **Rule 1303(b)(2)-Offset, 5-10-1996**; Rule 1303(b)(2)-Offset, 12-6-2002]
[Devices subject to this condition: C175]

D90.7 The operator shall continuously monitor the H2S concentration in the fuel gases before being burned in this device according to the following specifications:

The operator shall use an NSPS Subpart J approved instrument meeting the requirements of 40CFR60 Subpart J to monitor the parameter.

The operator shall also install and maintain a device to continuously record the parameter being monitored.

The operator may monitor the H2S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned in this device.

[40CFR 60 Subpart J, 6-24-2008]
[Devices subject to this condition: D27, D44, D46, D73, D74, D75, D76, C175]

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a bi-weekly basis whenever fuel oil is burned. The routine bi-weekly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was

achieved in the past, and either:

1) Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2) Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emissions Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1) Stack or emission point identification;

2) Description of any corrective actions taken to abate visible emissions;

3) Date and time visible emission was abated; and

4) All visible emission observation records by operator or a certified smoke reader.

[**Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; Rule 401, 3-2-1984**]
[Devices subject to this condition: C175, C396, C531]

E71.4 The operator shall not use this equipment to treat vapors containing halogenated HC compounds.

[Rule 1401, 3-4-2005]
[Devices subject to this condition: C175]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60 Subpart	J

[40CFR60 Subpart J, 6-24-2008]
[Devices subject to this condition: D27, D29, D30, D31, D44, D45, D46, D73, D74, D75, D76, C175, C531]

I1.2 The operator shall comply with all the requirements of the Stipulated Order for Abatement, Case No. 2914-72, dated October 14, 2004, in accordance with the

Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.

[**Rule 3004(a)(10)(C) 12-12-1997**]
[Devices subject to this condition: D29, D44, D45, D46, C175, C531]

I1.3 The operator shall comply with all the requirements of the Stipulated Order for Abatement, Case No. 2914-90, dated August 26, 2008, in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.

[**Rule 3004(a)(10)(C) 12-12-1997**]
[Devices subject to this condition: C175]

BACKGROUND

Paramount Petroleum Corporation (Paramount) operates a petroleum refinery located at 14700 Downey Avenue in the city of Paramount in the southern portion of Los Angeles County. Paramount processes crude oil into marketable products including gasoline, diesel fuel, jet fuel and other products. Emission sources at the refinery include combustion sources (heaters, boilers, and IC engines), fugitive components (pumps, valves, flanges, compressors, drains, etc.), cooling towers, storage tanks, flares and loading/unloading facilities. The South Coast Air Quality Management District (AQMD) identification number for the facility is 800183.

Paramount operates several incinerators at the refinery, one of which serves as an air pollution control device to control emissions of volatile organic compounds (VOC) and hydrogen sulfide (H_2S) from the refinery. The subject incinerator is the Tail Gas Treatment Unit Incinerator H-402 (Device ID C175).

A/N 512251 was received by AQMD on June 29, 2010 for a Permit to Construct. Paramount

requested to allow incinerator H-402 to be fueled with natural gas in addition to the permitted refinery gas. Paramount claims that burning clean natural gas will reduce the frequency of H-402 burner tip fouling and will reduce maintenance. It will also reduce the occurrence of potential permit deviations caused by temperature dips below 1400°F due to fouled burner tips.

The following table lists permit processing tracking information and fees.

Permit Administration & Application Tracking Information

Application No.	***512251***
Equipment Description	Tail Gas Incinerator
Date Received	6/29/2010
Deemed Complete Date	8/10/2010
Application Type	50: Permit to Construct
Application Status	20: Class I
Previous Application No.	436741, Status 26, Type 50
B-CAT No.	N/A
C-CAT No.	96
Fee Schedule	D
Fee Required	$ 4,572.56
Fee Submitted	$ 4,572.56

Attachment 1 includes a copy of the current permit for the tail gas incinerator taken from District Records.

COMPLIANCE RECORD REVIEW

A review of the AQMD Compliance Database showed 42 Notices of Violation (NOV) and Notices to Comply (NC) issued to Paramount in the past five years (07/01/05 – 07/29/10). All notices are either closed or in compliance status. The Stipulated Orders for Abatement (SOFA) are closed. Paramount is on a schedule to compliance on the Variance Cases.

It is noted here that the District issued NOV P53516 to Paramount on 7/1/2009 for operating the incinerator H-402 below 1400°F, contrary to its permit condition C8.4 which states that the operator shall use the equipment in such a manner that the temperature being monitored is not less than 1400°F. According to the Inspector's report, Paramount stated in the facility permit deviation report that because the operators were trying to minimize the flow of purge and vent gas to the flare, nitrogen purge gas was vented into the fuel gas system which lowered the

heating value of the fuel gas that feeds the heaters including incinerator H-402. The low heating value of the fuel gas caused the firebox temperature of the incinerator to dip below 1400°F.

A summary of the NOV, NC, SOFA and Variances are provided in Attachment 2.

PERMIT HISTORY

TAIL GAS UNIT INCINERATOR, H-402, A/N 512251

Permit to Construct		***Permit to Operate***		***Description of Permitting Activity***
A/N	***Issue Date***	***No***	***Issue Date***	
			5/20/68	Original Construction
C02396	12/29/75	M03695	4/27/78	To increase rating from 5 to 10 MMBtu/hr and construct a taller stack
104012	9/16/83	M32812	9/16/83	Change of ownership from Douglas to Pacific Oasis
104012	4/27/84	R-M32812	4/27/84	Pacific Oasis to Paramount
368539	1/17/01			To vent soil vapor extraction system to the incinerator
436741	10/27/09			To reroute certain process vent with high hydrogen sulfide (H_2S) content from H-402 Tail Gas Incinerator to the front of the Sulfur Recovery Unit (SRU). To correct the duty from 5 MMBTU/hr to 10MMBTU/hr.

PROCESS AND PROJECT DISCUSSION

Sulfur-laden gases from the refining process are directed to the Sulfur Recovery Unit, followed by the Tail Gas Unit. The exhaust stream from the Tail Gas Unit goes to Tail Gas Incinerator H-402 for final treatment. Paramount operates this incinerator at 1400ºF or higher to assure complete conversion to SO_2.

Currently, Tail Gas Incinerator H-402 is fueled with refinery fuel gas only. Paramount Petroleum proposes to add a natural gas fuel line that provides the capability to fuel H-402 with natural gas. This will allow the use of either natural gas or refinery gas. Paramount claims that burning clean natural gas will reduce the frequency of H-402 burner tip fouling and will reduce maintenance. It will also reduce the occurrence of potential permit deviations caused by temperature dips below 1400°F due to fouled burner tips.

Since natural gas is a cleaner fuel, it is expected that lower amounts of pollutants will be generated.

EMISSIONS CALCULATION

Criteria pollutant emissions are due to combustion in the H-402 Incinerator. Since there is no change in the H-402 Incinerator rating, there will be no change to the "potential to emit" emissions. The baseline emissions from the previous application, A/N 436741, as shown in the table below, were calculated using emission factors for refinery fuel gas.

COMBUSTION EMISSIONS CALCULATIONS SUMMARY

Pollutants	*Emission Factor (lb/MMscf)*	*Fuel Flow (MMscf/hr)*	*Ave. Hourly (lb/hr)*	*Max Daily (lb/day)*	*30 Day Average (lb/day)*	*Max Yearly Emissions (lbs/yr)*
ROG	7	9.68E-03	0.07	1.63	1.65	594.19
NOx	161	9.68E-03	1.56	37.44	37.96	13,666.28
SOx	6.76	9.68E-03	0.065	1.57	1.59	573.23
SOx	From SRU		107.00	2565	2601	936,225
CO	4.1	9.68E-03	0.04	0.95	0.97	348.02
PM	21	9.68E-03	0.20	4.88	4.95	1,782.56

Note: The reported RECLAIM emissions for both NOx and Sox for the last two years (2008 and 2009) are well below the calculated maximum emissions above.

RULES EVALUATION

PART 1: SCAQMD REGULATIONS

Rule 212 Standards for Approving and Issuing Public Notice (Amended Nov. 14, 1997)

212 (a) The applicant is required to show that the equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminants in violation of provisions of Division 26 of the State Health and Safety Code of these rules. The operation of the tail gas incinerator H-402 is expected to comply with this requirement.

212(c)(1) Public notification is required if any new or modified permit unit, source under Regulation XX, or equipment under Regulation XXX may emit air contaminants located within 1000 feet from the outer boundary of a school. However, this subdivision shall not apply to a modification resulting in a reduction of emissions and no

increase in health risk at any receptor location.

The source is within 1000 feet of a school; however, this project does not result in any emissions or health risk increase. Public notification is therefore not required.

212(c)(2) Public notification is required if any new or modified facility has on-site increases exceeding any of the daily maximums specified in subdivision (g) of this rule. Since there is no increase in emissions with the operation of the proposed project, public notification is therefore not required.

212(c)(3) Public notification is required if the increase in maximum individual cancer risk (MICR), based on Rule 1401, exceeds one in a million (1×10^{-6}), due to a project's new construction or proposed modification. Since there is no increase in emissions with the operation of the proposed project, public notification is therefore not required.

212(g) This subdivision sets forth the process for federal public notification and distribution and specifies the daily maximum emissions increase as follows:

Air Contaminant	Daily Maximum in lbs/day
Volatile Organic Compounds	30
Nitrogen Oxides	40
PM10	30
Sulfur Dioxide	60
Carbon Monoxide	220
Lead	3

Since there is no increase in emissions with the operation of the proposed project, federal public notification is not required.

Rule 401 Visible Emissions (Amended November 9, 2001)
Operation of the tail gas incinerator H-402 is not expected to result in visible emissions. Therefore, compliance with this rule is expected.

Rule 402 Nuisance (Adopted May 7, 1976)
Operation of the tail gas incinerator H-402 is not expected to result in a public nuisance. Therefore, compliance with this rule is expected.

Rule 404 Particulate Matter (Amended February 7, 1986)

404(a) PM concentration in the exhaust of tail gas incinerator, H-402, is 0.014 gr/dscf as shown in the calculation below. This is well under the limit of 0.152 gr/dscf from Table 404(a). Compliance is expected.

PM Concentration for Rule 404 Compliance

To calculate PM emission in grains/dscf, assume that the high fire for the burner is 10 MMBtu/hr, and the heating value of the gas is 1032 btu/cf. Thus,

Stack gas flow rate = 10 MMBtu/hr x 8710 dscf/MMBtu x 20.9 / ((20.9 – 3) x 60 min/hr = 1,694.96 dscfm

$$PM\ concentration = \frac{PM\left(\frac{lb}{hr}\right)\times 7000\left(\frac{gr}{lb}\right)\div 60\left(\frac{\min}{hr}\right)}{Exhaust\ Flow(DSCFM)} = \frac{0.20\times 7000\div 60}{1694.96}$$

$$= 0.014\left(\frac{grains}{dscf}\right)$$

Rule 407 Liquid and Gaseous Contaminants (Amended April 2, 1982)

407(a)(1) CO emissions from the tail gas incinerator, H-402, is expected to be well under the 2,000 ppmv limit specified in this rule. Compliance is expected.

407(a)(2) Since Paramount is a NOx/SOx RECLAIM facility, the SOx emission limits of this rule do not apply to the tail gas incinerator.

Rule 409 Combustion Contaminants (Amended August 7, 1981)

This rule limits particulate emissions from combustion to 0.1 grains per cubic foot @ 12% CO_2. Using the following equation, the resulting maximum combustion contaminant of 0.0004 grains /scf @ 12% CO_2 for the tail gas incinerator, H-402, as shown in the following table, is less than that required in this rule. Compliance is expected.

$$Max\ Combustion\ Particulate = \frac{A\ x\ B}{C\ x\ D}\ x\ 7000\ \frac{gr}{lb}$$

where: A = PM10 emission rate, lb/hr
B = Rule specified %CO_2 in the oxidizer stack, 12%
C = Actual %CO_2 in the oxidizer stack
D = Stack Exhaust flow rate, scf/hr

RULE 409 MAXIMUM COMBUSTION CONTAMINANT

Equipment	*Fuel Used*	*PM10 (lb/hr) (A)*	*% CO_2 in Exhaust (C)*[1]	*Stack Exhaust (scf/hr) (D)*[2]	*Max Combustion Particulate (gr/scf) @ 12%CO2*
H-402 Tail Gas Incinerator	Refinery Gas	0.20	4	101,697.77	0.0004

[1]%CO_2 in the exhaust is an estimated number from similar equipment
[2]Stack flow rate is 10 MMBtu/hr x 8710 dscf/MMBtu x 20.9 / ((20.9 – 3)

Reg IX Standards of Performance for New Stationary Sources (NSPS)

40 CFR 60, Subpart J: Standards of Performance for Petroleum Refineries

60.100 Applicability and designation of affected facility and reconstruction (Amended June 24, 2008)
The provisions of this subpart are applicable to any fluid catalytic cracking unit catalyst regenerator or fuel gas combustion device which commences construction, reconstruction or modification after June 11, 1973 and on or before May 14, 2007, or any Claus sulfur recovery plant which commences construction, reconstruction, or modification after October 4, 1976, and on or before May 14, 2007.

Tail Gas Incinerator, H-402, as a fuel combustion device
The incinerator is equipped with district-certified Subpart J CEMS to continuously monitor the hydrogen sulfide concentrations in the fuel gas. Existing Condition B61.2 limits the H_2S concentration to 160 ppm. Continued compliance is expected. A copy of the Final CEMS Certification is included in Attachment 3.

Reg XIII New Source Review (NSR)

Rule 1303: Requirements (Amended Dec. 6, 2002)
This rule allows the Executive Officer to deny a Permit to Construct for any new, modified or relocated source which results in an emission increase of any non-attainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is used. This rule also requires modeling and offset (among other requirements) if there is a net increase in any non-attainment air contaminants for any new or modified source.

1303(a) Best Available Control Technology (BACT)
The Permit to Construct for any new of modified source which

results in an emission increase of any nonattainment air contaminant shall be denied unless BACT is employed. Since the modification does not result in a net emission increase of any nonattainment air contaminant, it is exempt from this requirement. Previously, BACT has been met for the incinerator in that the exhaust temperature is required to be cooled to 120°F and vent gases are passed through a fiberglass or steel wool filter.

1303(b) This subdivision lists the following requirements for a Permit to Construct for any new or modified source which results in a net emission increase of any nonattainment air contaminant at a facility.

1303(b)(1) Modeling
1303(b)(2) Emission Offsets
1303(b)(3) Sensitive Zone Requirements
1303(b)(4) Facility Compliance
1303(b)(5) Major Polluting Facilities
- (A) Alternative Analysis
- (B) Statewide Compliance
- (C) Protection of Visibility
- (D) Compliance Through California Environmental Quality Act

Since the modification does not result in a net emission increase of any nonattainment air contaminant, all the requirements of this subdivision do not apply.

Reg XIV Toxics and Other Non-Criteria Pollutants

Rule 1401: New Source Review of Toxic Air Contaminants (Amended March 4, 2005)

This rule specifies that a project not result in an increase in maximum individual cancer risk (MICR) greater than 1×10^{-6}, or 10×10^{-6} if T-BACT is used, that the noncancer acute and chronic hazard index (HI) not exceed 1.0 and that the cancer burden not exceed 0.5 from new permit units, relocations or modifications to existing permit units which emit toxic air contaminants listed in Table 1 of this rule.

1401(g)(1)(B) Exemptions – Modification with No Increase in Risk

The requirements of this rule shall not apply to a modification of a permit unit that causes a reduction or no increase in the cancer burden, MICR or acute or chronic HI at any receptor location. Since the proposed change of condition will

not cause an increase in toxic air contaminants, it is exempt from the requirements of this rule.

Reg XVII Prevention of Significant Deterioration (PSD)

This regulation sets forth preconstruction review requirements for stationary sources to ensure that air quality in clean air areas does not significantly deteriorate while maintaining a margin for future industrial growth.

The SCAQMD is presently considered in attainment for the following criteria pollutants: NO_2, SO_2, CO and Lead; thus these pollutants are subject to PSD regulations.

According to the guidance provided in Mohsen Nazemi's email dated August 14, 2007, the AQMD has signed a new Limited PSD Delegation agreement with EPA effective July 25, 2007. Therefore, effective July 25, 2007, the AQMD has PSD responsibility for all new PSD sources and all modifications to existing PSD sources where the applicant is requesting to use the existing Regulation XVII to determine PSD applicability for a modification and not the recent calculation methodology adopted by the EPA as part of the NSR Reform.

The requirements of this regulation are not applicable for the proposed changes covered in this engineering evaluation since there is no net increase in annual emissions of any of the attainment air contaminant.

Reg XX Regional Clean Air Incentives Market (RECLAIM)
Rule 2005: New Source Review for RECLAIM
Paramount is a Cycle 1 NOx and SOx RECLAIM facility. It is therefore subject to Reg XX.

2005(c) Requirements for Existing RECLAIM facilities
This subdivision requires BACT, modeling and proof of sufficient RECLAIM Trading Credits (RTC) for an application for a Facility Permit amendment that results in any increase in NOx and SOx emissions. According to 2005(d), "An increase in emissions occurs if a source's maximum hourly potential to emit immediately prior to the proposed modification is less than the source's post- modification maximum hourly potential to emit. There will be no change in the ratings of the TGU Incinerator, therefore, there will be no increase in the maximum hourly potential to emit NOx or SOx emissions. This subdivision does not apply.

2005(g) Additional Federal Requirements for Major Stationary Sources
This subdivision lists additional requirements for application for a Facility Permit or an Amendment to a Facility Permit for a new, relocated or modified major stationary source, as defined in the Clean Air Act, 42, U.S.C. Section 7511a(e). Section 7511a(e)(2) defines modification as any change at a major stationary source which results in any increase in emissions. These applications will not increase NOx or SOx emissions; therefore this subdivision does not apply.

Rule 2011: Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions (Amended 5/6/05)
The tail gas incinerator H-402 running on refinery gas is subject to this rule as a major source. A SOx CEMS is installed, maintained and operated to comply with the requirements of this rule.

Paramount has evaluated any potential requirements for SOX CEMS upgrade or recertification due to the addition of natural gas to the tail gas incinerator H-402. The incinerator H-402 SOX CEMS is certified to operate at 0-100 ppm. The typical SOX operating range is 30-40 ppm. Based on the typical refinery gas and typical natural gas Total Sulfur (TS) values, and SRU vent gas stream with high sulfur content comparisons, the overall concentration of SOX operating range is expected to remain very similar to the current level. Therefore, any CEMS modification or recertification will not be required. According to Paramount, the District source testing engineer, Mr. Ron Lem, concurred that no modification or recertification of the SOX CEMS is required for the natural gas addition to the incinerator. Attachment 4 contains the evaluation submitted by Paramount. Continued compliance with this rule is therefore expected.

Rule 2012: Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions (Amended 5/6/05)
The tail gas incinerator H-402 is subject to this rule as a major source. A NOx CEMS is installed, certified, maintained and operated to comply with the requirements of this rule.

Paramount has evaluated any potential requirements for NOX CEMS upgrade or recertification due to the addition of natural gas to the tail gas incinerator H-402. The incinerator H-402 NOX CEMS is certified to operate at 0-100 ppm. The typical NOX operating range is 25-35 ppm. Based on the typical refinery gas and typical natural gas properties comparisons, the overall concentration of NOX operating range is expected to be within the current operating range. Therefore, any CEMS modification or recertification will not be required. According to Paramount, the District source testing engineer, Mr. Ron Lem, concurred that no

modification or recertification of the NOX CEMS is required for the natural gas addition to the incinerator. Attachment 4 contains the evaluation submitted by Paramount.

Reg XXX Title V Permits

Rule 3001(a): Applicability (Amended November 14, 1997)
The Title V Permit system is the air pollution control permit system required to implement the federal Operating Permit Program as required by Title V of the federal Clean Air Act as amended in 1990. Paramount has been designated as a Phase One Title V facility and has submitted A/N 337522 for their initial Title V permit on February 5, 1998. The final initial Title V permit was issued on February 27, 2009.

Rule 3005: Permit Revisions (Amended March 16, 2001)
The permit for this project will be issued as a minor revision of the Title V permit since the revision meets all of the requirements below and as such, it will be sent to the EPA for a 45-day review per Rule 3005(c)(2)(B). Public Notice is not required per Rule 3006(b).

As defined in Rule 3000(b)(12) a minor Title V permit revision is any revision that meets all of the criteria below:

1. Does not require or change a case-by-case evaluation of a RACT or MACT emission limitation
2. Does not require any significant change in monitoring terms or conditions in the permit, e. g. change in method, type, frequency, etc.
3. Does not require the relaxation of any recordkeeping or reporting requirement, term or condition in the permit
4. Does not result in an increase in emissions of a pollutant subject to New Source Review or HAP
5. Does not result in an installation of a new permit unit subject to a New Source Performance Standard (NSPS) pursuant to 40CFR 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 63
6. Does not result in a modification or reconstruction of an existing permit unit, resulting in new or additional NSPS requirements pursuant to 40 CFR 60, or new or additional NESAHP requirements pursuant to 40 CFR Part 61 or 63
7. Does not establish or change a permit condition that the facility has accepted to avoid an applicable requirement
8. Does not result in an emission increase of RECLAIM pollutants over the facility's starting allocation plus NTCs or higher allocation amount which has previously undergone a significant permit revision process and

9. Does not violate a regulatory requirement
10. Or, the proposed revision must require the incorporation of an existing general permit and its associated requirements into another Title V permit.

PART 2: STATE REGULATIONS

CEQA California Environmental Quality Act

CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) submitted by Paramount indicates that the project does not have any impacts which trigger the preparation of a CEQA document; therefore a CEQA analysis is not required.

PART 3: FEDERAL REGULATIONS

40 CFR 63 Subpart CC: National Emission Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries

§63.640 Applicability and designation of affected source (Amended May 25, 2001)

The refining process units and equipment located at the Paramount Refinery are subject to the requirements of this subpart addressing:

- miscellaneous process vents
- storage vessels
- wastewater streams,
- loading, and
- equipment leaks

Paramount has provided data to the District to show that Paramount Refinery is not a major HAP source which is defined as a source emitting 10 tpy of any single HAP or 25 tpy of all HAPs combined. Therefore, this subpart is not applicable because the refinery does not meet the criterion specified by paragraph (a)(1) of this section. Attachment 5 contains the Potential to Emit Hazardous Air Pollutants summary provided by Paramount to the District.

Note: Federal Rule 40CFR60 Subpart J is evaluated under Regulation IX above.

CONCLUSION AND RECOMMENDATION

The operation of the tail gas incinerator H-402 is expected to comply with all applicable District, State and Federal Rules and Regulations. Therefore, issuance of Permit to Construct is recommended.